

| L Number | Hits   | Search Text  | DB  | Tim stamp        |
|----------|--------|--|---|------------------|
| 1        | 194    | 349/54.ccls.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 13:08 |
| 8        | 1      | 97-6956  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 13:08 |
| 15       | 1      | 1997KR-0006956.ap.prai.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 13:22 |
| 22       | 1      | 1997KR-0004003.ap.prai.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:21 |
| 29       | 1      | 1987JP-0204650.ap.prai.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:24 |
| 36       | 1      | 1987JP-0204651.ap.prai.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:32 |
| 43       | 70938  | (eliminat\$3 prevent\$3) near4 (short\$3)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:37 |
| 50       | 966    | ((eliminat\$3 prevent\$3) near4 (short\$3)) and 349/\$.ccls.                           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:28 |
| 57       | 2386   | ((eliminat\$3 prevent\$3) near4 (short\$3)) near13 (source or drain)                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:39 |
| 64       | 82     | ((eliminat\$3 prevent\$3) near4 (short\$3)) near13 (source or drain)) and 349/\$.ccls. | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:39 |
| 71       | 3      | "02010331"   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:32 |
| 79       | 117237 | (eliminat\$3 prevent\$3 reduction reduc\$3) near4 (short\$3)                           | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:38 |

|    |      |  |   |                  |
|----|------|--|---|------------------|
| 86 | 3686 | ((eliminat\$3 prevent\$3 reduction reduc\$3) near4 (short\$3))<br>near13 (source or drain)                   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:39 |
| 93 | 113  | ((eliminat\$3 prevent\$3 reduction reduc\$3) near4 (short\$3))<br>near13 (source or drain)) and 349/\$.ccls. | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | 2003/05/01 14:39 |

DERWENT-ACC-NO: 1999-599446

DERWENT-WEEK: 200325

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TITLE: Manufacturing method for liquid crystal display device,  
involves forming source electrode, source line, drain  
electrode, gate shorting bar and source shorting bar by  
using chromium or chromium alloy

INVENTOR: LEE, S; LEE, S S

PATENT-ASSIGNEE: LG PHILIPS LCD CO LTD[GLDS] , LG ELECTRONICS INC[GLDS]

PRIORITY-DATA: 1997KR-0004003 (February 11, 1997)

PATENT-FAMILY:

| PUB-NO          | PUB-DATE         | LANGUAGE | PAGES | MAIN-IPC      |
|-----------------|------------------|----------|-------|---------------|
| → KR 98067741 A | October 15, 1998 | N/A      | 000   | H01L 027/12   |
| KR 244449 B1    | February 1, 2000 | N/A      | 000   | H01L 027/12   |
| US 6184948 B1   | February 6, 2001 | N/A      | 020   | G02F 001/1333 |

APPLICATION-DATA:

| PUB-NO       | APPL-DESCRIPTOR | APPL-NO        | APPL-DATE         |
|--------------|-----------------|----------------|-------------------|
| KR 98067741A | N/A             | 1997KR-0004003 | February 11, 1997 |
| KR 244449B1  | N/A             | 1997KR-0004003 | February 11, 1997 |
| US 6184948B1 | N/A             | 1998US-0005587 | January 12, 1998  |

INT-CL (IPC): G02F001/13, G02F001/1333 , G02F001/136 , G09G003/36 ,  
H01L027/12 , H01L031/00

ABSTRACTED-PUB-NO: KR 98067741A

BASIC-ABSTRACT:

NOVELTY - A source electrode (121), a source line (123), a drain electrode (131), a gate shorting bar (147G) and a source shorting bar (147S) are respectively formed by using chromium or chromium alloy. A gate insulation layer, a semiconductor layer (135) and a doped semiconductor layer are sequentially formed by depositing an insulating material, an intrinsic material and a doped material.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a liquid crystal display device.

USE - For liquid crystal display device used to display motion picture images.

ADVANTAGE - Reduces cost and increases production yield of LCD devices. Reduces masking step. Detects error when neighboring gate lines or source lines are shorted together.

DESCRIPTION OF DRAWING(S) - The figure shows the partial plan view of a liquid crystal display device.

Source electrode 121

Source line 123

Drain electrode 131

Semiconductor layer 135

Gate shorting bar 147G

Source shorting bar 147S

ABSTRACTED-PUB-NO: US 6184948B

EQUIVALENT-ABSTRACTS:

NOVELTY - A source electrode (121), a source line (123), a drain electrode (131), a gate shorting bar (147G) and a source shorting bar (147S) are respectively formed by using chromium or chromium alloy. A gate insulation layer, a semiconductor layer (135) and a doped semiconductor layer are sequentially formed by depositing an insulating material, an intrinsic material and a doped material.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a liquid crystal display device.

USE - For liquid crystal display device used to display motion picture images.

ADVANTAGE - Reduces cost and increases production yield of LCD devices. Reduces masking step. Detects error when neighboring gate lines or source lines are shorted together.

DESCRIPTION OF DRAWING(S) - The figure shows the partial plan view of a liquid crystal display device.

Source electrode 121

Source line 123

Drain electrode 131

Semiconductor layer 135

Gate shorting bar 147G

Source shorting bar 147S

CHOSEN-DRAWING: Dwg.5/8 Dwg.5/8

TITLE-TERMS: MANUFACTURE METHOD LIQUID CRYSTAL DISPLAY DEVICE FORMING  
SOURCE

ELECTRODE SOURCE LINE DRAIN ELECTRODE GATE SHORT BAR SOURCE  
SHORT

BAR CHROMIUM CHROMIUM ALLOY

DERWENT-CLASS: P81 P85 U14

EPI-CODES: U14-K01A2; U14-K01A3; U14-K01A4B;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2002-092028